

# Precalculus Overview

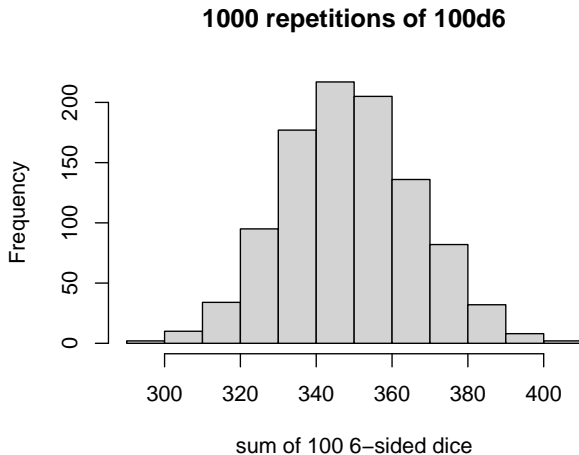
# Hello

- ▶ Chad Worley
- ▶ [chad.worley@bartcharter.org](mailto:chad.worley@bartcharter.org)

# Units

- ▶ Statistics
- ▶ Functions
- ▶ Exponential and Logarithmic Functions
- ▶ Trigonometric Functions
- ▶ Polar functions, vectors, and complex numbers
- ▶ Conic sections

# Statistics



# Functions

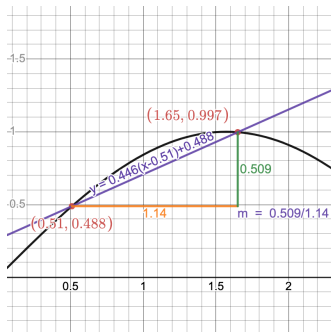
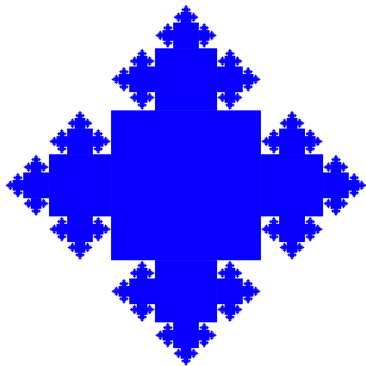
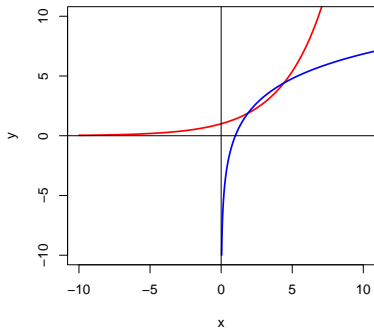


Figure 1: secant\_graph.png

<https://www.desmos.com/calculator/oiv0kjzsis>

# Exponential and Logarithmic Functions



<https://bit.ly/3qxfPop>

# Trigonometric Functions

<https://www.desmos.com/calculator/fhwymhwulu>

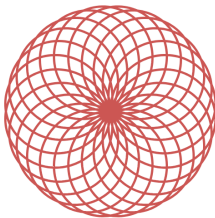


<https://auditoryneuroscience.com/acoustics/spectrogram>

# Vectors, Complex Numbers, Polar Functions, and Parametric Functions

<https://www.desmos.com/calculator/ekuv2dg7uv>

$$(a_1 + ib_1) \cdot (a_2 + ib_2) = (r_1 r_2)(\cos(\theta_1 + \theta_2) + i \sin(\theta_1 + \theta_2))$$





## Conic Sections

<https://commons.wikimedia.org/wiki/File:Solar-Cooker-2050-Paris.jpg>

